Department of Commerce National Telecommunications Information Administration

Request for Comments on Notice of Inquiry on the First Responder Network Authority Conceptual Architecture

Docket No.: 120928585-2505-01

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Submitted by the Fort Mojave Indian Tribe Department of Emergency Response

A. Introduction

The Fort Mojave Indian Tribe’s Department of Emergency Response oversees the tribal emergency management and Homeland Security programs.

Fort Mojave is a Native American Sovereign Nation with 831 residents living on 32,252 acres. The Ft. Mojave reservation is located in three states: California, Nevada and Arizona. The tribe occupies 12,633 acres in California in San Bernardino County, 23,669 acres in Arizona in Mojave County, and 5,582 acres in Nevada in Clark County. Tribal headquarters and the Department of Emergency Response are located in Needles, California.

Fort Mojave is one of the most advanced tribes and rural communities with regard to implementation of its public safety network, technology transition, emergency planning, and regional coordination. In addition, Fort Mojave is one of only ten tribes that have created their own regulatory telecommunications services, deploying 115 miles of fiber optic network throughout the rural community. 100 percent of the Tribal community has access to the Internet through broadband service provided by the Tribe's telecommunications broadband network.

Fort Mojave is a major Tri-State Emergency Management and Homeland Security partner. Because of its unique location at the junction of three states, Fort Mojave tribe has had to coordinate its public safety planning and interoperability with California, Nevada and Arizona.

Fort Mojave has led jurisdictional planning sessions that included participation by authorities from the three states and the Federal government. Fort Mojave Tribe owns and operates the largest public venue building in the Tri-State area, which is the regional Point of Distribution Site (POD Site) and regional public emergency center. With our regional partners we have conducted mass vaccination HSEEP exercises with the facility staffed through MOAs and volunteer groups, and is capable of processing 75,000 regional clients.
The Tribe has taken on the effort to help other tribal communities with homeland security and public safety training. Fort Mojave led a public safety planning training sessions with Arizona Tribes in Yuma, Arizona in October, 2012 on public health emergency preparedness, and in October again, has just completed a 14-tribe training session at Fort Mojave, on how to merge environmental management, public health preparedness with emergency response management.

In November, 2012, the Arizona Department of Emergency Management (ADEM) will hold a state planning conference presenting similar plans to merge public health emergency preparedness with emergency services management. Fort Mojave will be participating in this session as the liaison for Arizona’s 21 tribes.

For its own community, Fort Mojave is currently developing a Continuity of Government/Continuity of Operations Plan, which is one of the first such protocols developed by a tribal nation. In addition, the Tribe is developing an Interoperable P 25 compliant radio communications system with its public safety plan. These plans are specific to the Fort Mojave Public Safety needs and are not generic. All response plans are National Incident Management System (NIMS) compliant.

In addition, the Department of Emergency Response has developed working plans for: a Base Tribal Emergency Management Plan; FEMA approved Multi-Hazard Mitigation Plan; Emergency Management Preparedness and Response Plan for Public Health Emergency Preparedness; Bioterrorism Response Plan; Pandemic Influenza Response Plan; Mass Sheltering Plan; Special Needs Shelter Plan; School Closing Plan; Mass Fatality Plan and Point of Distribution site Plan.

Fort Mojave has an Incident Command Structure and two Emergency Operating Center locations; one located in California and the other one in Arizona. The current operations and goals of the Fort Mojave Indian Tribe’s Emergency Management and Homeland Security programs are to develop Tribal specific capabilities in the areas of Tribal Critical Infrastructure Protection; Regional collaboration in the Intelligence and Information-sharing integration; and further consideration of Memorandums of Agreements for regional partnerships within the Tri-State area and with non-tribal agencies.

The Federal government has recognized the leadership role and adoption of modern public safety strategies by Fort Mojave Tribe by allocating $1,714,557 in grants from Tribal Homeland Security Grant Program (THSGP) for development of the tribal COOP/GOG plan; an award for $1,537,895 to upgrade the Tribal Police radio system to P 25 compliancy; and a $61,162 California Emergency

1 Federal Emergency Management Agency’s (FEMA) National Incident Management System.
2 Award No. 2010-SS-T0-0058;
3 Award No. EMW-2011-SS-00084;
Management Assistance Grant \(^4\) to develop a tribal Terrorism Liaison Officer (TLO) and Intelligence Officer program.

A. Executive Summary of Fort Mojave’s NOI Comments

1) Rural and Tribal communities need assistance to assess their public safety needs;
2) A Nationwide Public Safety Broadband Network must be inclusive of all communities;
3) Communities with a disparity of public safety readiness and lack of Telecommunications connectivity should be prioritized for direct assistance;
4) Broadband and E911 mapping are crucial to the implementation of a nation-wide public safety broadband network;
5) Public safety broadband redundancy requires an integration of the Public Switched Telephone Network; land radio network; public mass media network; and mobility networks;
6) The construction of a single unified public safety broadband network requires incentives and innovation through grants;
7) Sustainability of the Network should be addressed through a universal service style mechanism;
8) Public safety capacity obligations and pre-emption protocols should be included in the architecture and deployment of the nation-wide public safety broadband network (with new add-ins to IPAWS\(^5\));
9) Training and regional coordination are key components for the deployment of the nationwide public safety broadband network;
10) Communities and regions need direct assistance to attain interoperability; and community and regional planning;
11) A unified or hybridized public safety network must have an open platform and be accessible to all public safety users—all impediments to access and use must be removed;
12) Radio spectrum to accompany public safety broadband deployment must similarly be open and accessible—without impediments;
13) Many tribal communities need help understanding the interoperability between current, P25 compliant, and 700 MHz technologies;
14) Many tribal and rural communities need help to become P25 compliant;
15) Tribal Nations should be consulted and made participants in the launch of a nation-wide public safety broadband network;
16) While funding for the Public Safety Broadband Network is to be allocated through states, FirstNet should ensure that Tribal lands receive a fair and

\(^4\) California EMPG Award No. 071-25184;
adequate share of funding and technical assistance to help link Tribal communities to the proposed Network;

17) NIMS should be updated with the new Public Safety Broadband protocols and information, and “plain language” standardization be mandated.

B. Fort Mojave’s Comments on the Proposed Public Safety Broadband Network (PSBN)

Tribal and Community Need for Public Safety Assistance

The Native American tribes (564 federally recognized tribes) in the United States are the least communications connected communities in the United States. It is estimated that fewer than 20 percent of Native American tribal residents have access to broadband and high speed Internet.

Native American communities are located in the most remote regions of the United States with wide-ranging, but frequently harsh topologies. At the same time, Native American communities also suffer the highest rates of poverty, unemployment and geographic isolation—the very communities the Middle-Class Tax Relief and Jobs Creation Act should be targeting. These basic factors underscore the fact that Native American communities have the lowest capacity emergency services and access to public safety networks. Native American communities possess the most obsolete public safety technologies and have the lowest rates of interoperability. In short, Native American communities are on the other side of the public-safety divide.

For example, at Fort Mojave Indian Tribe—even though the Tribe had launched its own regulatory telecommunications service and had taken aggressive control over its infrastructure services—the Department of Emergency Response in 2010 reported to the Tribe the absence of cohesive interoperability and preparedness for emergency services. The Department of Emergency Response found that among 49 tribal offices surveyed, 11 utilized two-way radios that were independently licensed and could not talk to each other. “They are not interoperable internally or with outside emergency agencies.” The Tribal emergency authority also found that 38 departments relied on landlines or cell phones, and “these are the least reliable means of communicating in the event of a large-scale event.” Fort Mojave acted quickly to address the need for public safety upgrades, funding an assessment of public safety needs, implementing interoperability plans, and adopting newer technology changeover.

Other Tribal communities are barely coping with their public safety needs. Few have effectively coordinated and consulted with state and local governments surrounding their tribes.
Tribal communities remain un-connected, are isolated geographically, are underserved by commercial providers, and are often off the public safety grid. These real-world challenges must be addressed for the Public Safety Broadband Network to function as a nationwide network.

Tribal communities need assistance with public-safety assessment, interoperability, and compliance with newer public safety regulatory mandates. Communities underserved by public communications and unconnected to safety networks should be prioritized for assistance.

Recommendation:

A. Tribes should be funded directly and adequately to help community public safety planning, interoperability, adoption and linkage to the proposed nationwide Public Safety Broadband Network;

B. Because the economic conditions in tribal communities are among the worst in America, tribal public safety network construction and community adoption can be a key catalyst for job creation and tax contributions to the federal government;

C. See specific tribal recommendations in the Unique Needs of Tribal Communities section.

The Essential Components of a Comprehensive Public Safety Broadband Network for Rural and Tribal communities

Public safety is often seen in a one-dimensional manner as a network of two-way radios. But requirements for an effective first-responder network require a far more comprehensive approach to ensure that a safety response system will function when confronted with a diverse range of large-scale events. Network redundancy is vital for this to occur, but redundancy must be predicated on a diverse range of (multi-media) communications platforms.

There are four essential platforms that must be integrated in the design of a single first-responder network. The Public Switched Telephone Network, with an evolving upgraded high-speed capacity, must be connected to the two-way radio network and woven into the fabric of the nationwide public safety broadband network. The FirstNet board has recognized and emphasized the importance of the third platform, the mobility wireless network. A final essential platform for public safety is the distribution of vital public information through the mass media broadcast systems. These four platforms must be part of the architecture for the proposed Public Safety Broadband Network. (And vital up-grading within the IPAW system must accompany the architectural design.)
Fort Mojave raises strong concerns about FirstNet’s proposal to base the fundamental platform of the single network on the commercial cellular network. The Tribe’s primary concerns are: first, in many emergencies, the narrowband and the fundamental lack of capacity of most cellular systems will render first response large-scale communications demand untenable. Second, there is a fundamental lack of uniformity in cellular equipment and technologies, though the migration to the 700 MHz spectrum may ease some of the issues. Third, the precedent Public Switched Telephone Network is far more ubiquitous, stable, and where fiber optic networks are available, more robust and secure. Fourth, in remote rural and tribal areas, cellular networks are sparse, limited and obsolescent.

Cellular networks, while nimble and flexible, have limited capability—but can serve important redundancy purposes. However, Tribal nations have an additional concern about the projected dependence on cellular networks. Commercial cellular providers and networks have historically bypassed tribal communities and have historically neglected contact or consultation with Tribal governments.

Because of the necessity to economize on investment, a hybridized public/private broadband public safety network will have to be thought through carefully, with a strong mandate for national security and public interest pre- emptions. How PSBN can be disentangled from private and proprietary interests will be very difficult.

However, a hybridized public/private network must be governed by the emphasis on: A) using existing robust and ubiquitous PSTN networks; B) removing proprietary and equipment roadblocks to community public safety access—including fees for use; and, C) including incentives and mandates to dedicate a discreet portion of the network, bandwidth or fiber strands, specifically for public safety use. (The IPAWS mandates will have to be upgraded to reflect and support the new PSBN changes.)

A public safety broadband network cannot be constructed without comprehensive mapping and the ability to deliver precise geographic targeting. Through its broadband stimulus mapping grants, the Department of Commerce has raised the level of awareness for the need for a comprehensive inventory data base and the importance of geographic mapping. Yet it is important for Fort Mojave to raise a strong concern that the fifty states’ broadband mapping efforts do not accurately reflect conditions on tribal reservations. Because of traditional jurisdictional tensions between Tribal nations and state governments, and the lack of knowledge about tribal communities, many tribes feel the broadband mapping project undertaken through the broadband stimulus grants have left the tribal communities off the grid of vital mapping and inventory data.

There is also the essential problem that most Native American communities are not E-911 mapped, creating substantial blind spots for emergency response.
Because of the cost entailed and a lack of public safety readiness awareness, few tribes are fully E-911 mapped.

Another side of the challenge for local public safety providers is the flawed 911 dispatch system. The Public Safety Answering Point (PSAPs) are the first line of public safety response. But the spotty and patched together PSAP configurations in tribal areas have created recurring problems for tribes. (A 911 call from Window Rock at one time was patched from Window Rock to Albuquerque and back to the community for dispatch; a call from the Acoma Pueblo is patched through Grant County auspices back to the community for dispatch; and it is told that the entire state of California’s wireless 911 calls are patched through two PSAPs for dispatch.) Every Tribe can tell stories of how their local 911 call dispatches resulted in deadly mishaps. In addition, these PSAP configurations lack interoperable linkage to essential first-responder partners.

In the effort to unify a nationwide functional public safety broadband network, FirstNet must see to it that local protocols and local code vernacular are standardized. The National Incident Management System has been a key foundation for standardizing and unifying diverse information and protocols. The NIM system will need to be adapted to include both up-to-date range of information on the PSBN network and new technology applications, but must also enforce a “plain language” mandate emblematic in the current NIM system to standardize language and codes.

FirstNet will need to be innovative and adaptable deploying a single nationwide Public Safety Broadband Network—especially as public safety obligations and mandates are being overlaid within hybridized public and private networks.

**Recommendation:**

A. NTIA and FirstNet must ensure there is a comprehensive and reliable broadband and E-911 mapping system in place.
B. There should be financial support for community and regional public safety assessment (through FirstNet grants).
C. There should be financial support for interoperable hardware and software trunking console equipment;
D. NTIA and FirstNet should support reform of the 911 PSAP network;
E. NTIA and FirstNet must ensure that greater radio spectrum—perhaps through novel open access permitting—be made available for the public safety needs of tribal communities;
F. NTIA and FirstNet should use an open access architecture for the Public-Safety Broadband Network (the National Science Foundation can assist the design of the public safety broadband network based its experience with the launch of the Internet 2 and Lambda Rail high-speed network projects);
G. NTIA, FirstNet and the FCC should consider the imposition of public safety obligations and pre-emption mandates on public/private network providers, similar to mass media public service mandates—as an add-on to IPAWS—and consider using dedicated public safety capacity and bandwidth in all prospective network architecture designs;

H. NTIA and FirstNet should update NIMS data and information tied to the Public Safety Broadband Network and move to “plain language” standardization of public safety protocols.

**Primary Challenge: Interoperability**

The world of public safety today is comprised of a patchwork of legacy systems and competing technologies. Rural and tribal communities are behind in comprehensive planning, often behind on regional coordination, short on funding, behind on regulatory requirements and changes, and uncertain on how to build future public safety networks and link with other communities.

Technology-wise, there are a myriad of legacy and competing technology systems, 800 MHz, 700 MHz, UHF and VHF platforms. Equipment providers are reluctant to give up their proprietary products and services to move toward open platform networking. Community users are at the mercy of equipment manufactures, limited budgets, and limited know-how to adapt to the forward looking mandates and state of technology in the market-place today. With pressure to include usage of the 700 MHz spectrum and the new FCC Project 25 requirements, low-awareness and legacy equipment saddled tribal and rural communities struggle to address and attain inter-operability in their public safety networks and planning.

The Fort Mojave Department of Emergency Response has a strong concern about tribal lack of capacity and understanding for the interoperability challenges facing tribal communities. One principle Fort Mojave has learned is: there is not a single best network technology for every tribal and rural community. While many authorities push for 700 MHz and UHF adoption, communities like Fort Mojave, for reasons of its topology, regional adoption, and investment, champion VHF and 800 MHz technologies as best solution for its region. Therefore, it is incumbent to embrace new interoperability devices that support interfacing between competing technologies and products. Fort Mojave sees the adoption of new hardware and software on trunked systems that interface divergent equipment and technologies as crucial to the success of a single public safety broadband network. Such equipment and software ease the way for tribal and rural communities uncertain how to proceed with interoperability and technology choices.

Without devices, strategies and coordinated interoperability fixes, the FirstNet Broadband Network will not effectively function to meet first-responder needs.
Recommendation:

A. Funding and resources must be provided for community public safety assessment;
B. Funding and resources must be provided to target specific safety equipment, software, protocol planning and negotiation training;
C. NTIA and the FirstNet should help fund equipment and software that facilitate interoperability and adoption for tribes;
D. NTIA and the FCC must dedicate free radio spectrum to accompany open access equipment dedicated to public safety use;

Radio Spectrum Availability, Access and Hindrances

Two-way radio, cellular and backbone wireless equipment and networks require sufficient radio spectrum to support their functions. The proposed public safety network will require radio spectrum robust enough to sustain broadband demand; possess the right propagation values for navigating rural and rugged topologies; and is usable unimpeded by proprietary roadblocks, hardware lockout, and toll-booth obstructions.

Fort Mojave is uncertain how the release of 700 MHz public safety spectrum allocation will affect public safety equipment choices and interoperability with existing land radio and current spectrum use. Fort Mojave advocates the 700 MHz public safety bandwidth should be implemented through an open architecture. In addition, FirstNet should insure that spectrum access should be unimpeded by proprietary licensing, proprietary equipment, user fees, or any impingement that can impede use or access by providers. This is a matter of national security and public priority. Putting this spectrum in the hands of private and proprietary commercial providers would impeded public safety access and lead to contentiousness between stakeholders. As an illustration, tribal nations have not had a positive history with cellular providers who have commercially bypassed tribal communities, and ignored consultation with tribes about their commercial and public safety needs.

In the current world of public safety deployment, community public safety providers have been left on their own to purchase or lease bandwidth from commercial license holders to support their hardware. This puts tribal communities at a disadvantage due to the costs entailed, lack of familiarity with spectrum technology and the regulatory scheme behind spectrum use, and unwillingness of license holders to accommodate tribal nations. This is compounded by the limited service commercial providers offer on reservations.
An open equipment platform and spectrum access removes the cost, proprietary, and other impediments to ubiquitous reach of the proposed FirstNet Broadband Network

Recommendation:

A. Provide open access for all variety of equipment on the 700 MHz public safety platform;
B. Remove any impediment—proprietary, ownership and fee attachments--to community access and use of the public safety band;
C. Do not mandate a commercial spectrum platform for the FirstNet Broadband Network, and include plans to use the existing PSTN platform;

The FCC’s proposed (Project 25) change from existing bandwidth size and equipment switch-over will catch many tribal communities unprepared.

The FCC has issued a mandate to move public safety communication use and equipment from 25 KHz frequency band-with to 12.5 KHz capacity by January, 2013, with an additional transformation from 12.5 KHz to 6.25 KHz platform targeted for 2017. The FCC mandate for change comes with both a required licensing conversion by January 1, 2013 and sanctions for non-compliant use after January 1, 2013.

The current public safety marketplace is comprised of equipment makers and service providers that sell proprietary hardware. While equipment manufactured in the recent 9 years come with narrow band capacity, it is not clear that equipment vendors have communicated sufficiently with Tribal communities about the Project 25 narrow-band change. It is unclear how vendors will charge for switch-over solutions. Tribes are uncertain about the broader implication of the P 25 future on their public safety service. In addition, Tribes are confused on which way to proceed with technology and equipment choices with the proposed advent of 700 MHz public safety spectrum use and a new generation of equipment.

Fort Mojave is concerned about the uncertainty about the impact of the P25 project changes and how the impending deadline will impact tribes—as well as how the 700 MHz public safety spectrum and equipment use will affect tribal technology choices. This may put tribal communities behind the curve on meeting their public safety obligations.

NTIA and FirstNet should provide technical assistance and training to Tribal communities on the impact of equipment choices, advent of the 700 MHz bandwidth use and equipment introduction, and interoperability between current, P25 and 700 MHz equipment and technologies.

Recommendation:
A. Require the FCC to provide immediate training and technical assistance to tribal governments to help the communities attain compliance and understand the impact of newer standards on equipment adoption and on interoperability planning;

B. Issue a moratorium for sanctions for Tribal communities and extend the transition period to the new frequency requirements to ease the transition for Tribes;

C. Work with equipment manufacturers to provide training sessions and technical assistance to tribal governments to help the communities attain compliance and understand the impact of newer standards and equipment;

D. Similar to the FCC’s discount coupon program for the conversion from analog to digital television platforms for consumers, in concert with the industry, provide discount coupons or subsidies to assist tribes to convert their equipment over to compliant equipment and networks;

The Public Safety Broadband Network initiative must be accompanied by a complementary set of supportive resources, initiatives and reforms.

The success of a nationwide single Public Safety Broadband Network must include a strategy and support for community assessment, planning, access reform and adoption measures essential to supporting a unified public safety broadband network. These are the additional mundane activities that will impact the success of the Public Safety Broadband Network.

Unfortunately, many tribal and rural communities are unprepared for the rapidly changing technology and regulatory ramp-up for tomorrow’s public safety network. Community assessment is essential. Yet funding cycles have already terminated for community assessments. Technology and equipment acquisition is a daunting prospect for purchasers that know little about technology, the impact of topology and geography on technologies and competing proprietary products, and the requirements of regional and federal regulations.

Regional cooperation and planning are essential for the success of system-wide adoption and national network deployment. This key activity needs to be supported by NTIA and the FCC through technical support and funding.

Public Safety training is another key requirement to implementing an efficient first responder system. Lack of training for emergency response, equipment use, protocols, and catastrophic events, is a recipe for a response failure.

FirstNet and NTIA can play an important role provide direct assistance to Tribes with their public safety planning and needs.

Recommendation:
A. FirstNet and NTIA must ensure that sufficient resources and technical assistance are provided to assist communities undertake assessment of their needs and understand the equipment needed to meet the community’s needs as well as FirstNet’s requirements;

B. FirstNet and NTIA must ensure that equipment providers and local governments include communities in regional planning as well as to meet FirstNet compliance requirements;

C. FirstNet and NTIA must provide sufficient resources and technical assistance to provide public safety training to enhance the deployment of the Public Safety Broadband Network;

D. FirstNet and NTIA should support the establishment of regional Public Safety Academies to provide essential public safety training and a resource point for regional first-responder coordination;

E. FirstNet and NTIA should establish a clearinghouse to promulgate information on best practices, mapping, technical assistance, equipment advice, and information essential to move forward on public safety adoption;

Funding and Sustainability

Fort Mojave recognizes that the Public Safety Broadband Network will be built out through grants and funding from the Middle-Class Tax Relief and Job Creation Act of 2012. Fort Mojave makes numerous recommendations on how the grants for the proposed Network should be targeted. However, NTIA and FirstNet must long to the long-term future of the PSBN beyond the life and spending levels of the Middle-Class Tax Relief and Job Creation Act. Fort Mojave recommends that NTIA and FirstNet should prepare a separate source of funding to sustain the Network and support its evolution as a nationwide network. This sustainable model should replicate or entail the features of public funding from the Universal Service Fund.

Recommendation:

NTIA and FirstNet should adopt or adapt a funding mechanism similar to the Universal Service Fund derived from PSTN and wireless network rate payers or public subscription fee generated from medical service users.

Unique Tribal Issues and Concerns.

Fort Mojave has experienced both sides of the public safety divide: lack of emergency preparedness, as well as the ramp-up to state-of-the-art public safety adoption and technology upgrades. Because Native American communities are
frequently located in the most remote and unconnected regions of the United States, NTIA and FirstNet must prioritize the inclusion of Tribal communities as part of the proposed nation-wide Public Safety Broadband Network. No community should be left behind in the Public Safety Broadband Network.

In the overarching imperative to find a workable architecture to deploy a functional public safety network, it is crucial to include tribal nations in the planning of the network, particularly as the network must connect with and be deployed through tribal lands. Tribal governments have the highest accountability for providing public safety service to their community.

It is well established that Tribal governments are a separate jurisdiction and sovereignty than state governments. Tribes have complex relationships with states and varying degrees of cooperation. In the upcoming deployment of the Public Safety Broadband Network, funding will be driven through the States. This is a major concern for Indian sovereign nations both for jurisdictional reasons and for the reason tribes want to ensure that their public safety needs will be met.

As an illustration of how states do not look after the interest of tribal communities, in 2011, FEMA gave California nearly $14.37 million for the California Emergency Management Planning grants. The State’s 122 tribes received $155,000 of these 2011 grants!

Tribes are also concerned that tribal nations have a voice in how FirstNet decisions are being made. More specifically, FirstNet must ensure that FirstNet resources target Tribal communities adequately and fairly, and these communities have a participatory role in the design and implementation of the Public Safety Broadband Network—particularly regarding deployment on tribal lands.

There is an additional important matter regarding radio spectrum that NTIA should address: the disparity of access to the public resource of radio spectrum by tribal nations. It is ironic that the radio spectrum platform, managed exclusively by the federal government, has been the least utilized medium for meeting the broadband needs of rural America—and the least available communications platform to Tribal communities. Ten (of 564) tribal nations have started their own wire-line regulatory telecommunications services. But only one tribe, Gila River Indian community, owns a commercial wireless license—allocated through the legacy lottery allotment process prior to auctions allocations. Therefore Fort Mojave urges NTIA to consider devoting an additional nonLicensed allocation of the spectrum for public safety and public interest broadband use by Tribal governments.

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6Standing Rock Sioux Tribe purchased a partitioned sub-territory right from the area license holder to start its phone company. In the recent Mobility Fund auctions, Standing Rock was able to present proof of access to spectrum—1900 MHz—to win the bid to construct a 3-G network in the un-served 4-district tribal community.
**Recommendation:**

A. NTIA and FirstNet must include tribal governments in the planning of the public safety network to ensure that the unique needs of tribal communities are met and to facilitate community adoption of public safety measures;

B. FirstNet should establish a Tribal Public Safety Clearinghouse to promote the rapid deployment of information, promote education of public safety administration, and to promulgate best-practices to help tribal communities implement their own public safety networks and solutions;

C. NTIA and FirstNet should ensure that at least one Board member is Native American and has sufficient experience or knowledge of public safety to play a substantive role in the build-out of the FirstNet Network;

D. NTIA and FirstNet must ensure that Tribal communities get their fair share of funding to attain public safety parity and to connect to the nationwide Public Safety Broadband Network;

E. NTIA and FirstNet should provide direct technical assistance and provide training to Tribes on planning, interoperability, and adoption—including drafting and negotiating Memorandums of Understanding;

F. NTIA and FirstNet should help fund purchase of trunking interoperable equipment and assist with their programming tie-in to Federal and state authorities;

G. NTIA and FirstNet should assist tribal communities to be compliant with the FirstNet proposals requirements and implementing guidelines;

H. There should be consultation between PSTN providers and Tribal governments on implementing forward looking interoperability plans, particularly with regard to PSBN deployment on tribal lands;

I. There should be consultation between wireless cellular providers and tribal governments on implementing wireless community interoperability plans, particularly with regard to PSBN deployment on tribal lands;

J. NTIA and FirstNet should help fund E-911 mapping of Tribal communities;

I. NTIA and FirstNet should help Tribes to attain non-commercial mass media licenses to provide public safety information to the community;

J. Tribal communities should be targeted as pilot areas for additional spectrum allocation with open platform access and broadband capacity sufficient enough to meet the public interest and public-safety needs of Native American communities;
D. Conclusion

The Middle-Class Tax Relief and Job Creation Act of 2012 seeks to stimulate hard-hit local economies, and, to subsidize the deployment of a Public Safety Broadband Network. In light of the potential threat level against the United States from without and from within the domestic economy, the proposed single first-responder Public Safety Broadband Network is timely and vital.

For Native American communities looking from the other side of the public safety divide, the need and timing of the unified public safety broadband network could not be more urgent. The thin line between life and death on a reservation, given tribal geographic and communications isolation, is stark. FirstNet must recognize the unique needs of Native communities and make every affirmative effort to include tribal participation in the construction and coordination of the FirstNet Nationwide Network. Fort Mojave, has evolved from telecommunications isolation to becoming its own high-speed broadband provider, and from an unprepared public safety status to a state-of-the-art public safety adopter, offers its assistance to FirstNet as it moves forward to the creation of a nationwide first responder broadband network.

Respectfully Submitted

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